REMARKS

Claims 1-11, 17, 18 and 21 are pending.

Claims 1-11, 17, 18 and 21 are rejected.

Claims 1 and 17 are amended.

Specification

The Applicants have amended the title of the application to read:

A Process for Reducing Residual Monomer Concentration

No new matter has been added.

Support for the amendment can be found in the abstract.

35 USC 132

The Office has requested that Applicants cancel "new matter". Applicants disagree with the Examiner's assessment that the amendment "and the formed polymer in step (b) is not a gelled polymer" is new matter. However, Applicants have deleted the amendment submitted on January 13, 2005. Thus the "new matter" rejection is overcome.

35 USC 102 (e)

Claims 1-11, 17-18 and 21 are rejected under 35 USC 102(e) as being anticipated by Cywar et al US 6,262,141.

Applicants have amended claims 1 and 17 in order to more particularly point out and distinctly claim their invention. Claims 1 and 17 have been amended to add the phrase "the formed polymer in step (b) is not subjected to a comminuting step. No new matter has been added.

The amendment is supported by the disclosure on page 1, third full paragraph. The third paragraph states:

> "Typically particulate polymers are prepared introducting initiators into an aqueous solution of the monomers and polymerizing to a polymer gel which is then cut into smaller pieces, dried and then ground to the appropriate particle size."

Thus, "if alternative elements are positively recited in the specification, they may be explicitly excluded in the claims." See MPEP 2173.05(i). Also see *in Re. Johnson*, 558 F2d 1008, 1019, 194 USPQ 187, 196 (CCPA1977).

Although the term comminuting is not specifically used in the disclosure, the term is synonymous with terms such as cut or ground. See MPEP 2363.07.

> The mere inclusion of dictionary or art recognized definitions known at the time of filing an application would not be considered new matter. See page 2100-183 (Rev. 2, May 2004)

Cywar et al. requires a comminuting step which is emphasized thoughout the Cywar disclosure. See for example

col. 3, lines 30-34;

line 45; col. 4, lines 4-8 in particular **"Low residual monomer content is obtained according to the invention by comminuting a gelled polymer..."** ;

col. 4, lines 11-12 **"provided that such monomers must be able to form a gelled polymer capable of being comminuted..."**;

col 5, lines 52-54 **"... provided that the product of the initial polymerization is capable of being comminuted gel particles."**;

col. 6, lines 16-21 **" the gelled polymer is subjected to a comminution process to produce particles of which preferably at least 90% by weight are less than about 9.5 mm in size."**;

As the Applicants have amended their claims (1 and 17) to exclude this key element (comminuting the gel), the anticipation rejection is overcome.

35 USC 103(a)

Claims 1-11, 17-18 and 21 are rejected under 35 USC 103(a) as being unpatentable over EP 0290814 in view of Cywar et al US '141.

The Office alleges that EP '814 discloses the instantly claimed method except for adding the ultraviolet initiator to the monomer mixture. Cywar et al. teaches activation of redox or thermal initiators in the presence of an ultraviolet initiator. Thus the Examiner states it would be obvious to add the ultraviolet inititator to the monomer mix taught by Cywar in the method disclosed by EP '814 thus arriving at the present invention.

Both Cywar (see page Table 1, col. 11 and title for example) and EP'814 (see page 14 Table 1) discuss reduction of residual monomer. Both references disclose methods for reducing the level of monomer present in the formed polymer (Cywar) or formed composite (EP'814).

However,
The Federal Circuit has said "Recognition of a need does not render obvious the achievement that meets that need. There is an important distinction between the general motivation to cure an uncured disease and the motivation to create a particular cure. Recognition of an unsolved problem does not render the solution obvious. See *In Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc*, 381 F.3d 1371 (Fed. Cir, 2004).

EP0290814 relates to the formation of a water absorptive composite material. The water absorptive polymer is formed in the presence of a prefabricated fibrous substrate. See page 5, lines 31-44. The primary polymerization of the monomer is on the fibrous substrate. See page 5, line 52. The primary polymerized prefabricated fibrous substrate is then treated with ultraviolet irradiation to induce secondary polymerization. See page 7, lines 40-41.

Cywar discloses a process of preparing an acrylic polymer by forming a gelled polymer in the absence of UV radiation; comminuting the gelled polymer and then irradiating the gel particles with light to decompose the photoinitiator. See claim 1, col. 15.

EP029084 is primarily concerned with a formation of a **composite**. Cywar is primarily concerned with preparation of a gelled **comminuted** polymer.

The composite of EP029084 is relatively thick in relation to the comminuted gel of Cywar. Applicants point to examples 1-8 in EP '814 wherein the weight of impregnated fabric with the monomer solution is increased by at least 5.8 to 12 times. Thus the composite density after impregnation of the solution is increase by at least a factor of 5 giving an article limited to light penetration.

Cywar et al. states throughout the disclosure that a comminuting step is required and that the comminuting step be done simultaneously or after step (b). For example, see the various referrals to the comminuting requirements in Cywar listed above under the 102(e) rejection.

Furthermore, Cywar discusses the prior art and their shortcomings in column 3, lines 6-25. **Cywar goes on to state that "Alternatively, redox and photopolymerization can occur together as described in German Patent No. 19748153. However, the processes described in these patents do not overcome the aforementioned shortcoming of photopolymerization system. In particular, the gel thickness is limited by the ability of light to penetrate.**

Thus Cywar states again and again in the disclosure that the comminuting of the gelled particles is important. The comminution step is important in obtaining a gel thickness that light might penetrate. EP'814 deals with a relatively thick composite not a comminuted gel. Thus according to the teachings of Cywar, a person skilled in the art would not expect addition of the ultraviolet initiator according to Cywar to work in the process of EP'814.

The Examiner has stated that combining the ultraviolet initiator as in Cywar with the EP '814 would be obvious. However, this would require that only certain aspects of the invention of Cywar be combined with the process of EP'814. Specifically the comminuting step would have to be omitted or one would not end up with a composite as described in EP'814.

As stated in *In re Wesslau*, 353 V.2d 238, 241, 147 USPQ, 391, 393 (CCPA 1965):

> It is impermissible within the frame work of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

As Cywar clearly regarded the comminuting step as an important element, to ignore that step and include only those elements which would achieve the present invention is improper.

Provisional Double Patenting

Claims 1-11, 17, 18 and 21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending application No. 10/468191 in view of Cywar et al. US 6,262,141.

The Office suggests that it would be obvious to add a redox or thermal intiator to an aqueous mixture of ethylenically unsaturated monomer and photoinitiator set forth in the claims of SN '191 as taught by Cywar to effect polymerization.

The determining factor in deciding whether or not there is double pantenting is the existence vel non of patentable difference between two sets of claims (*In re Borah*, 354 F.2d 1009, 148 USPQ 213). The Applicants fail to understand why the present claims are obvious in light of SN 10/468,191 claims in view of Cywar et al. US 6,262,141.

The claims of SN 10/468,191 require two separate photoinitiators, each activated at different intensities. The present application claims a process of preparing a polymer comprising the steps a through c wherein step b occurs in the absence of light and **in the absence of a comminution step** (present claims 1 and 17). SN/10/468,191 makes obvious only the use of at least two separate photoinitiators each activated at different specific intensities. The claims of this copending application do not suggest running any of the steps in the absence of light. Cywar discloses running step b in the absence of light **but absolutely requires a comminuting step** before exposing the formed polymer in step b. Thus, given the importance Cywar attributes to the comminuting step (see above under 102(e) rejection), Cywar does not provide any motivation to run the process as claimed in copending SN 10/ 468,191 **without a comminuting step.** The present claims **exclude a comminuting step**. Thus the provisional double patenting rejection is improper.

Reconsideration and withdrawal of the rejection of claims 1-11, 17, 18 and 21 is respectfully solicited in light of the remarks and amendments *supra*.

Since there are no other grounds of objection or rejection, passage of this application to issue with claims 1-11, 17, 18 and 21 is earnestly solicited.

Applicants submit that the present application is in condition for allowance. In the event that minor amendments will further prosecution, Applicants request that the examiner contact the undersigned representative.

Respectfully submitted,

Ciba Specialty Chemicals Corporation
540 White Plains Road
Tarrytown, New York 10591
(914) 785-2768
SAL\21923_cont.doc

Shiela A. Loggins
Agent for Applicants
Reg. No. 556,221